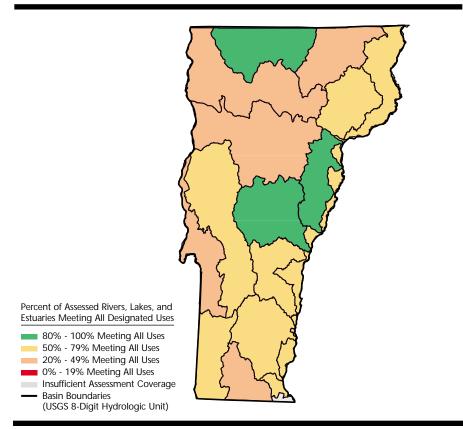
## Vermont



For a copy of the Vermont 1998 305(b) report, contact:

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### Surface Water Quality

Vermont's rotational strategy calls for assessment of one-fifth of the state each year, resulting in a complete assessment every 5 years. As part of this strategy, Vermont reported only on rivers and streams in three major river basins and on 138 lakes for the 1998 report. The current survey found that 93%, 77%, and 88% of the assessed river and stream miles in the White River, Otter Creek, and Lower Lake Champlain basins, respectively, fully support the water uses for which they have been classified. For assessed lakes, 24% fully support all

designated uses, including fish consumption advisories (which primarily affect lake fish) for women of child-bearing age and children age 6 and under).

Common pollutants found in the assessed waterbodies include silt, pathogens, and nutrients, which come from eroding stream/lake banks, urban areas, and agricultural lands. Additional causes of pollution include thermal modifications, flow modifications, metals, total toxics, algae, and low dissolved oxygen resulting from atmospheric deposition, natural sources, flow regulation, and habitat alterations.

Many of Vermont's lakes and rivers have been cleaned up by construction of approximately 150 municipal and industrial wastewater treatment facilities. However, more work needs to be done to complete the cleanup job-primarily to reduce pollution from nonpoint sources.

#### **Ground Water Quality**

The quality of Vermont's ground waters is not well understood. Ground water contamination has been detected at hazardous waste sites. Other sources of concern include failing septic systems, old solid waste disposal sites, agriculture, road salt, leaking underground storage tanks, and landfills. The state needs to implement a Comprehensive Ground Water Protection Program, but lacks the financial and technical resources to do so.

### Programs to Restore Water Quality

It is estimated that 90% of the miles and acres of the state's impaired waterbodies are caused by nonpoint source pollution.

Vermont has been able to effectively target areas, design work plans, compete for and capture funding and implement nonpoint source projects directed at restoring and protecting water uses and values. (Two examples of these projects are the Lake Champlain Basin Watershed Nation Monitoring Program Project, an effort to evaluate the effectiveness of improved livestock grazing, and the Vermont Better Backroads Program, a project to provide grant money to towns for BMPs).

# Programs to Assess Water Quality

Vermont's monitoring activities balance short-term intensive and long-term trend monitoring. Notable activities include fixed-station monitoring on lakes and ponds, citizen monitoring, long-term acid rain lake monitoring, compliance monitoring for permitted dischargers, toxic discharge monitoring, fish contamination monitoring, and ambient biomonitoring of aquatic insects and fish.

Vermont is developing a watershed approach to surface water quality planning, which calls for surface water plans for all major drainage basins or subbasins on a periodic basis. The watershed approach may also include local watershed management plans with protection and restoration strategies for individual watersheds.

Vermont is developing biological methods for vernal pools and white cedar swamps.

#### **Individual Use Support in Vermont** Percent Good Good Fair Poor Not **Attainable** (Fully (Partially (Not (Threatened) Designated Usea Supporting) Supporting) Supporting) Rivers and Streams (Total Miles = 7,099)b **Total Miles** 68 Assessed 21 8 3 1.157 90 1,156 1 1 75 13 1,157 3 Lakes (Total Acres = 228,915)<sup>c</sup> **Total Acres** Assessed 35 24 23 18 16,343 40 38 21 16,171 0 58 20 11 12 16,263

Note: Figures may not add to 100% due to rounding.

<sup>-</sup> Not reported in a quantifiable format or unknown.

<sup>&</sup>lt;sup>a</sup> A subset of Vermont's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>&</sup>lt;sup>b</sup>Includes perennial streams only.

<sup>&</sup>lt;sup>c</sup> Excluding Lake Champlain.